Stated Meeting, September 17, 1897.

Vice-President PEPPER in the Chair.

Present, 16 members.

Correspondence was submitted and donations to the Library were reported.

The announcement of the decease of William S. Baker, a member of the Society, on the 8th day of September, et. 74 years, was made.

Mr. R. P. Field presented a communication on "The Span of Life."

Mr. Henry C. Mercer made some remarks on the "Survival of the Art of Illuminating Manuscripts among the Germans in Eastern Pennsylvania."

The Committees on By-Laws and Finance presented reports. The Society was adjourned by the presiding officer.

THE SPAN OF LIFE.

BY ROBERT P. FIELD.

(Read September 17, 1897.)

On Thursday, February 28, 1895, the *Evening Bulletin*, a daily journal published in Philadelphia, had an editorial upon long life in Philadelphia, referring to an address by Dr. Lawrence Turnbull on "Longevity and Personal Hygiene," in which he presented an array of facts with regard to the advanced age of some of our best known men, and said: "The Biblical idea of three-score years and ten is gradually ceasing to be the limit in our day, owing to better sanitary laws and regulations," which this journal states is in direct opposition to the common belief that, in the United States at least, the activity and restlessness of the people are tending to shorten the period of life enjoyed by the average man. This belief, it says, is entirely reasonable owing to the greater hurry and cram of the people of this country, and in view of the fact that they sleep less and hurry more over their food than do the people of other nations.

The editorial goes on to say, for instance, that the late Dr. Oliver Wendell Holmes believed that the life of a poet is generally not long; yet refers in his writings to Longfellow, Halleck and Whittier, all of whom attained to over seventy-five years of age and one of them to eighty-five, and that Holmes himself was eighty-five when he died. Other well-known men are cited by Dr. Turnbull as examples of longevity; for instance, Mr. Gladstone living at eighty-five, Bismarck at eighty, Pope Leo XIII at eighty-five, and in our country Senator Morrill, of Vermont, eighty-four; ex-Senator Payne, eighty-five; Neal Dow, of Maine, ninety-one; Robert C. Winthrop, eighty-seven; ex-Secretary McCulloch, eighty, and ex-Senator Thurman, eighty-one, in addition to whom he mentions Dr. William H. Furness and the Hon. Frederick Fraley. The apparent conclusion reached by the paper is that long life in America is not uncommon, and that, therefore, the average age is greater than the so-called three-score years and ten.

This editorial was penned more than two years ago. My attention was called to it by Dr. J. Cheston Morris, who knew that I was interested in such matters. The remark by Dr. Turnbull on the "Biblical idea" aroused my curiosity and a desire for investigation. As some of the names mentioned in this paper appear upon the rolls of the American Philosophical Society, it seemed as if the "experience" of the Society in this direction would be interesting. The "experience" of the Society does not bear out the assertion of Dr. Turnbull if his statement be taken to mean that nowadays the average life is greatly prolonged beyond the "three-score and ten."

In the general list of the members of the Society from 1743 to 1894, inclusive, there have been 1118 deaths where the ages have been recorded. The average age at death is seventy and one-eighth years. The youngest age is twenty-five (25) years. Two deaths are recorded at that age, Dr. John Pennington and Joel B. Reynolds. The oldest age at death was Dr. Ed. Holyoke, of Massachusetts Bay, having died at the advanced age of one hundred and one (101).

The average length of membership is found to have been twenty-two and sixty-four one-hundredths years (22.64). The shortest membership is that of Capt. Karl Chevalier Rousseau d'Happoncourt, who was a delegate from K. K. Military and Geographical Institute of Vienna on the occasion of the Society's sesqui-centen-

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nial, was elected to membership October 20, 1893, and unfortunately died only six days afterwards, on the 26th.

The longest membership was that of Thomas Bradford, who was elected May 18, 1768, at twenty-three (23) years of age and died on May 7, 1838, at ninety-three (93), having been a member seventy (70) years, less eleven days.

Six cases show a membership of sixty-five (65) years and over. The average age at entry (or at election) was forty-seven and forty-nine one-hundredths (47.49) years.

From the *record* it would appear that several persons were elected at a very early age—Rev. Henry Steinhauer as early as thirteen (13), but there are so few that this error (if it be one) could not affect the general finding.

The general deduction from this study shows:

1118 members entering at an average age of 47.49
1118 members living after election a total of
25,312 years or averaging22.64
1118 members living 78,403 years or averaging
at death70.13

It is exceedingly interesting and instructive to note that comparng this with the "American Experience Table of Mortality," calculated from the experience of the insurance companies, we find that

Persons living at the age of forty-seven and a
half47.50
May be expected to live for twenty-two seventy-
two one-hundredths years22.72
Or to reach the average age of70.22

But the editorial refers to "the common belief that, in the United States at least, the activity and restlessness of the people are tending to shorten the period of life enjoyed by the average man." In order to see whether the American members live a shorter time than others, or whether the "leaven" of the foreign element has increased the apparent longevity, a study was made of the "experience" of the American members alone for twenty-five years.

The record was studied with reference to the deaths which have occurred during the twenty-five years ending December 31, 1894. Three hundred and fourteen (314) members died during this period. the ages of two hundred and ninety-three (293) of whom are known

The result of the study of these shows:

Two hundred and ninety-three members enter-
ing at an average age of48.57
Two hundred and ninety-three members living
after election a total of 6253 years, averaging. 21.34
Two hundred and ninety-three deaths of mem-
bers living a total of 20,484 years, or averag-
ing69.91

Even this small number shows a fairly close agreement with the tables.

This shows practically the same result as that given above. This result bears out the mortality tables and the "Biblical idea."

The table shows that people aged48.57	years
Might be expected to live22.00	66
And reach the age of70.57	"

which is but sixty-six one-hundredths of a year longer than this actual "experience," a variation easily accounted for by the small number making up the "experience."

Some years ago I had occasion to look up the "experience" of clergymen in connection with some of the different Protestant denominations. In this study the records of eight denominations were consulted, involving seven thousand six hundred and twenty-two (7622) lives, who lived 495,967 years, or an average of 65.07 years.

The average age at which a man enters the ministry is from twenty-five (25) to thirty (30) years, averaging, say, twenty-eight (28) years.

By looking at our "American Experience Table" again, we find the "expectation"

For those entering the table at twenty-eight	
years is	years
If we add the entering age to this28	66
_	
We get	vears

which is almost exactly the experience of these ministers.

Returning to the records of the Society we find that on December 31, 1894, the longest term during which any one still living had

been a member was fifty-five (55) years, Mr. Martin H. Boyé, who was elected January 17, 1840, being still alive. The next longest term was that of Prof. E. Otis Kendall, LL.D., who was elected January 21, 1842, or fifty-three years previous. Our President, Hon. Frederick Fraley, LL.D., was elected July 15, 1842, and had lived for fifty-two and one-half years. The average length of membership of the living members on that date was sixteen and one-half years (16.05), but this count includes only the American members, of whom there were three hundred and thirty-seven (337).

While to a certain extent the average health may be improving, it will take long periods of time for the predictions of physicians to falsify the mortality tables. In this connection it might be well to note that the records of the Board of Health of Philadelphia show that, one year with another, while improved sanitary conditions modify the fatality of certain zymotic diseases, the death rate in Philadelphia remains practically stationary and at about two per cent.

THE SURVIVAL OF THE MEDIÆVAL ART OF ILLUMINATIVE WRITING AMONG PENNSYLVANIA GERMANS.

BY HENRY C. MERCER.

(Read September 17, 1897).

The notion of a novel collection was suggested to me by a visit paid last April to the house of an individual who has long been in the habit of buying "penny lots" of so-called trash at country sales. There, scattered in confusion about the premises, rusting, warping and crumbling, lay a heterogeneous mass of objects of wood or iron, which by degrees I recognized as of historic value. Forgotten by the antiquary, overlooked by the historian, they were the superannuated and cast-away tools of the Pennsylvanian pioneer. Because they illustrated, with the fidelity of visual facts, the felling of the forest, the building of the log cabin, cooking in the open fire and the disused arts and crafts, professions and amusements of colonial times, I gathered them together and, ransacking Bucks county for other specimens, stored them by the wagonload in the museum of the Bucks County Historical Society, at